

Application Serial Number: 09/885,725
Amendment dated: January 3, 2005
Reply to office action dated October 3, 2005

Amendments to the Specification

Please insert the following heading at page 16, line 2:

Brief Description of the Drawings

Please replace the paragraph beginning at page 16, line 4, with the following rewritten paragraph:

FIG. 1 shows micrograph showing premolar teeth two weeks after treatment with EMD. The pulp wound has features of a classic active wound, i.e. a necrotic superficial layer overlaying a narrow zone of chronic inflammatory cell infiltrate. The new dentin-like tissue (ND) is formed at the border between the wound tissue and the healthy subjacent pulp tissue. Sections stained with H&E, ~~scale bar is 1 mm.~~

Please replace the paragraph beginning at page 16, line 10, with the following rewritten paragraph:

Shows micrograph showing premolar teeth two weeks after treatment with Ca(OH).sub.2. Normal appearing pulp tissue without inflammatory cells can be observed adjacent to the pulpal wound, resembling an inactive wound typical for a chemical burn. No new dentin or odontoblasts were observed in or close to the wound in these teeth. Sections stained with H&E, ~~scale bar is 1 mm.~~

Please replace the paragraph beginning at page 16, line 16, with the following rewritten paragraph:

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Showing premolar teeth four weeks after treatment with EMD. The pulp wound now shows features of a classic wound healing, i.e. a superficial layer or scab, consisting of extracellular matrix proteins and cell remnants, overlaying a zone of chronic inflammatory cell infiltrate. Subjacent to the healing wound a bridge of new dentin-like tissue (ND) is forming, sealing off the wound from the healthy pulp. Sections stained with H&E, ~~scale bar is 0.5 mm.~~

Please replace the paragraph beginning at page 16, line 23, with the following rewritten paragraph:

Shows a higher magnification of FIG. 3, the new hard tissue is bordered with odontoblast-like cells and tissue subjacent to the forming bridge is healthy and free of inflammatory cells. Sections stained with H&E, ~~scale bar is 1 mm.~~

Please replace the paragraph beginning at page 16, line 28, with the following rewritten paragraph:

Showing premolar teeth four weeks after treatment with Ca(OH)₂. Normal appearing pulp tissue without inflammatory cells can be observed adjacent to the inactive pulpal wound. A small amount of new dentin is formed along the preexisting dentin walls adjacent to the wound. ~~C is experimental cavity. D is dentin, ND is newly formed dentin-like tissue, and P is pulp tissue.~~ Sections stained with H&E, ~~scale bar is 0.5 mm.~~

Please replace the paragraph beginning at page 17, line 4, with the following rewritten paragraph:

Showing premolar teeth four weeks after treatment with Ca(OH)₂. Normal appearing pulp tissue without inflammatory cells can be observed adjacent to the

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inactive pulpal wound. A small amount of new dentin is formed along the preexisting dentin walls adjacent to the wound. ~~C is experimental cavity. D is dentin, ND is newly formed dentin-like tissue, and P is pulp tissue.~~ Sections stained with H&E, ~~scale bar is 0.5 mm.~~

Please replace the paragraph beginning at page 17, line 13, with the following rewritten paragraph:

Figure 7a) shows u tooth treated with EMD. The pulp wound shows features of a classic active wound, i.e. a necrotic superficial layer overlaying a narrow zone of chronic inflammatory cell infiltrate. The new dentin (ND) is formed at the border between the wound tissue and the healthy subjacent pulp tissue.

Please replace the paragraph beginning at page 17, line 18, with the following rewritten paragraph:

Figure 7b) shows u tooth treated with Ca(OH) Normal appearing pulp tissue without inflammatory cells can be observed adjacent to the pulpal wound, resembling an inactive wound typical for a chemical burn. No new dentin or odontoblasts were observed in or close to the wound in these teeth.

C is experimental cavity. D is dentin, ND is newly formed dentin, and P is pulp tissue. Sections stained with H&E, scale bar is 1mm.

Please replace the paragraph beginning at page 17, line 26, with the following rewritten paragraph:

Figure 8a) shows u tooth treated with EMD. The pulp wound now shows features of a classic wound healing, i.e. a superficial layer or scab, consisting of

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extracellular matrix proteins and cell remnants, overlaying a zone of chronic inflammatory cell infiltrate. Subjacent to the healing wound a bridge of new dentin (ND) is forming, sealing off the wound from the healthy pulp tissue.

Please replace the paragraph beginning at page 18, line 1, with the following rewritten paragraph:

Figure 8b) Shows a higher magnification of 8a), the new dentin is bordered with normal appearing odontoblast and tissue subjacent to the forming dentin bridge is healthy and free of inflammatory cells.

Please replace the paragraph beginning at page 18, line 5, with the following rewritten paragraph:

Fig 8c) shows tooth treated with Ca(OH) Normal appearing pulp tissue without inflammatory cells can be observed adjacent to the inactive pulpal wound. A small amount of new dentin is formed along the dentin walls adjacent to the wound. Occasionally, small islands of irregular dentin could be observed in the surrounding pulp tissue at some distance from the wound site.

C is experimental cavity. D is dentin, ND is newly formed dentin, and P is pulp tissue. Sections stained with H&E, scale bar is 1mm (a and c) or 0.5 mm (b).